

CLAIMS

What is claimed is:

- 1 1. An apparatus comprising:
2 a private branch exchange (PBX) switch;
3 a residential gateway to receive channel associated signals (CAS) from
4 the PBX switch;
5 a programmable CAS module to convert the CAS signals into signals of
6 another telephony protocol.
- 1 2. The apparatus of claim 1, wherein the programmable CAS module
2 further comprises a programmable local call agent finite state machine to
3 interpret events and to output user defined responses.
- 1 3. The apparatus of claim 1 further comprising a user interface tool to
2 enable a user to create a CAS program file.
- 1 4. The apparatus of claim 3, wherein the CAS program file includes a
2 system section, an incoming signals section, an outgoing signals section, and a
3 state events action section.

1 10. The method of claim 7, wherein the event is an external trigger received
2 by the CAS engine.

1 11. The method of claim 7, wherein the action is a response by the CAS
2 engine to a state-event condition.

1 12. An apparatus comprising:
2 means for allowing a user to define a state, an event, or an action of a
3 telephony protocol;
4 means for downloading the user defined state, event, or action to a
5 channel associated signal (CAS) engine; and
6 means for changing a telephony protocol of the CAS engine
7 corresponding to idle telephone lines associated with the CAS engine based on
8 the user defined state, event, or action.

1 13. The apparatus of claim 12, wherein the telephony protocol is a CAS
2 protocol.

1 14. The apparatus of claim 12, wherein the state is a transient condition of
2 the CAS engine.

